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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,511	07/23/2002	David M. Hoffman	15-CT-6001	6623

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EXAMINER

CHURCH, CRAIG E

ART UNIT PAPER NUMBER

2882

DATE MAILED: 08/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

10/064,511

Applicant(s)

HOFFMAN, DAVID M.

Examiner

Craig E. Church

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

**The drawings are bjected t under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the collimator containing filters of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.**

**The specification and figure 4 are objected to as the teaching beginning on page 6 that the x-ray tube Kvp is varied along the Z axis is erroneous since the Kvp is a scalar and does not have a direction (it is not a vector). Kvp is the peak voltage applied between the anode and cathode of the tube and is not a characteristic of the x-ray beam emitted by the tube whose spectral content may be varied such as by spatially dependent x-ray filtering. Correction is required.**

**Claims 3 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitations conveyed by the terms "a single scan" are unclear. It is noted that a scan may comprise any number or fractions of complete rotations and does not further define the structure being claimed.**

**Art Unit: 2882**

**The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this**

**Office action:**

**A person shall be entitled to a patent unless –**


**(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.**

**Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamazaki et al (5570403). Yamazaki teaches a dual energy CT scanner comprising a rotating gantry, x-ray tube 10 with means to vary the spectral content of the x-ray beam in the Z direction (figure 16 and lines 19-22 of column 9), plural detector rows 1-2, data acquisition means 50, reconstruction processor 60 and display means 70 for showing the spectrally discriminated and combined images. In the system of figures 5 and 6 (lines 49 of column 6 to line 13 of column 7) energy discrimination is provided by scintillators 31 and 32 which have the same absorption characteristics but are of different thicknesses. Lines 14-18 of column 7 explain that the scintillators may be the same thickness, and filters are employed for spectral selection. Lines 22-67 of column 7 discuss use of wedge filters (sloped) between the source and the patient. Figure 15A shows that the filter for detector 2 is air. Lines 29-36 of column 8 reveal that the Kv applied to the x-ray tube may be varied as its focal spot is shifted to favor each detector row. Lines 43-53 of column 9 suggest that more than two detector rows may be used.**

**Art Unit: 2882**

**The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

**Any inquiry concerning this communication should be directed to Craig E. Church at telephone number 703-308-4861.**

A handwritten signature in black ink that reads "Craig E Church". The signature is written in a cursive, slightly slanted style.

**Craig E. Church  
Senior Examiner  
Art Unit 2882**